What is claimed is:

1. A method of inhibiting osteoclast-mediated bone resorption, comprising inhibiting activity of a gene product encoded by an osteoclast associated gene, said gene being selected from the group consisting of OC 1-285, SEQ ID NO: 4, 34, 38, and 43.

2. A method of inhibiting osteoclast-mediated bone resorption, comprising inhibiting expression of an osteoclast associated gene, said gene being selected from the group consisting of OC 1-285, SEQ ID NO: 3, 32, 33, 37, 41, and 42.

3. The method of claim 1, wherein said gene product is selected from the group consisting of SEQ ID NO: 4, 34, 38, and 43.

4. The method of claim 2, wherein said gene is selected from the group consisting of SEQ ID NO: 3, 32, 33, 37, 41, and 42.

5. A method of inhibiting osteoclastogenesis, comprising contacting an osteoclast precursor cell with an inhibitor of MIP1γ.

6. The method of 5, wherein said precursor cell is a monocyte or macrophage.

7. The method of 5, wherein said inhibitor is an antibody that binds to an epitope of MIP1γ.

8. The method of 5, wherein said inhibitor is a polypeptide that binds to a CCR1 receptor but does not activate said receptor.

9. A method of promoting osteoclast survival, comprising contacting an osteoclast cell with a MIP1γ polypeptide, wherein a decrease in apoptotic cell death occurs in the presence of said polypeptide compared to that in the absence of said polypeptide.

10. The method of claim 9, wherein said method further comprises contacting said osteoclast cell with a compound selected from the group consisting of RANKL, LPS and IL-1α.

11. A method of inhibiting proliferation of osteoclast cells, comprising contacting said cells with an inhibitor of MIP1γ expression or activity.

12. A method of stimulating osteoclast-mediated bone resorption, comprising contacting an osteoclast cell with a MIP1γ polypeptide.

13. A method of inhibiting osteoclastogenesis, comprising contacting an osteoclast precursor cell with an inhibitor of an activity of a gene product selected from the group consisting of SEQ ID NO: SEQ ID NO: 4, 34, 38, and 43.

14. The method of claim 13, wherein said osteoclastogenesis is inhibited by inhibiting fusion of a plurality of precursor cells into an osteoclastic giant cell.

15. The method of claim 14, wherein said fusion of a plurality of precursor cells into an osteoclastic giant cell is inhibited by at least 10% in the presence of said inhibitor compared to that in the absence of said inhibitor.

16. The method of claim 13, wherein said precursor cell is a monocyte or a macrophage.

17. The method of claim 13, wherein said inhibitor is a polynucleotide comprising a sequence selected from the group consisting of SEQ ID NO:26, 27, 28, and 29.

18. The method of claim 13, wherein said inhibitor is a polynucleotide that inhibits binding of a Brn3 polypeptide to a target site.

19. The method of claim 18, wherein said target site is a polynucleotide comprising a sequence selected from the group consisting of SEQ ID NO:11, 12, 13, and 14.

20. A method of inhibiting bone resorption, comprising increasing activity of a gene product of an osteoclast associated gene said, gene being selected from the group consisting of OC 286–364.

21. A method of inhibiting bone resorption, comprising increasing expression of an osteoclast associated gene said, gene being selected from the group consisting of OC 286–364.

22. A reference expression profile, comprising a pattern of gene expression of two or more genes selected from the group consisting of OC1-364.

23. A method for determining whether a subject is suffering from or is predisposed to developing a bone disease, comprising providing a biological sample from the subject; detecting at least one osteoclast marker in said biological sample; measuring the level of expression of said at least one osteoclast marker selected from the group consisting of OC 1-285, SEQ ID NO: 3, 32, 33, 37, 41, and 42; and comparing the level of expression of said osteoclast marker in said biological sample to the level of expression of the osteoclast marker in a control sample, wherein an increase in the level of expression of said osteoclast marker in the subject compared to the control sample indicates the presence of or predisposition to a bone disease.

24. A method for determining whether a subject is suffering from or is predisposed to developing a bone disease, comprising providing a biological sample from the subject; detecting at least one osteoclast marker in said biological sample; measuring the level of expression of said at least one osteoclast marker selected from the group consisting of OC 286-364; and comparing the level of expression of said osteoclast marker in said biological sample to the level of expression of the osteoclast marker in a control sample, wherein a decrease in the level of expression of said osteoclast marker in the subject compared to the control sample indicates the presence of or predisposition to a bone disease.